

Please add new claims 41- 64 as follows.

41. (New) A method of claim 3, wherein the feeding of the microorganism increases at least one of energy balance, plasma non-esterified fatty acids levels, and plasma leptin level in the ruminant fed the microorganism when compared to the respective energy balance, plasma non-esterified fatty acids levels, and plasma leptin level in the ruminant when not fed the microorganism.

42. (New) A method of claim 41, wherein the energy balance is increased.

43. (New) A method of claim 41, wherein the plasma non-esterified fatty acids levels are increased.

44. (New) A method of claim 41, wherein the plasma leptin level is increased.

45. (New) A method of claim 3, wherein the ruminant is fed the microorganism until populations of  $10^5$  to  $10^8$  CFU/ml ruminal fluid are established in the rumen.

46. (New) A method of claim 3, wherein a milk produced by the ruminant fed the microorganism has an enhanced protein content when compared to a milk produced by the ruminant when it is not fed the isolated microorganism.

47. (New) A method of claim 3, wherein a milk produced by the ruminant fed the microorganism has a higher percent of fat when compared to a milk produced by the ruminant when it is not fed the isolated microorganism.

48. (New) A method of claim 3, wherein a milk produced by the ruminant fed the microorganism has a substantially greater percent of solids-non-fat when compared to a milk produced by the ruminant when it is not fed the isolated microorganism.

49. (New) A method of feeding a ruminant, comprising feeding the ruminant an isolated microorganism comprising a *Propionibacteria* strain having a group I profile produced by *Xba* I digests of genomic DNA as shown in Figures 1-2 and Table 3.

50. (New) A method of claim 49, wherein the strain comprises a *Propionibacteria* strain selected from the group consisting of strains P169, P170, P179, P195, and P261.

51. (New) A method of claim 50, wherein the strain comprises strain P169.
52. (New) A method of claim 49, wherein the ruminant fed is a bovine.
53. (New) A method of claim 49, wherein the ruminant is fed the microorganisms such that the amount of microorganism delivered to the ruminant is about  $6 \times 10^9$  CFU to about  $6 \times 10^{12}$  CFU/animal/day.
54. (New) A method of claim 53, wherein the ruminant is fed the microorganisms such that the amount of microorganism delivered to the ruminant is about  $6 \times 10^{11}$  CFU/animal/day.
55. (New) A method of claim 49, wherein the ruminant is fed 17 g of a 1:10 mixture of the microorganism, which has been freeze-dried and which is at a concentration of  $3.5 \times 10^{10}$  CFU/g, and a carrier on a daily basis.
56. (New) A method of claim 49, wherein the ruminant is fed the microorganism from -2 to 12 weeks postpartum.

57. (New) A method of claim 49, wherein the feeding of the microorganism increases at least one of energy balance, plasma non-esterified fatty acids levels, and plasma leptin level in the ruminant fed the microorganism when compared to the respective energy balance, plasma non-esterified fatty acids levels, and plasma leptin level in the ruminant when not fed the microorganism.

58. (New) A method of claim 57, wherein the energy balance is increased.

59. (New) A method of claim 57, wherein the plasma non-esterified fatty acids levels are increased.

60. (New) A method of claim 57, wherein the plasma leptin level is increased.

61. (New) A method of claim 49, wherein the ruminant is fed the microorganism until populations of  $10^5$  to  $10^8$  CFU/ml ruminal fluid are established in the rumen.

62. (New) A method of claim 49, wherein a milk produced by the ruminant fed the microorganism has an enhanced protein content when compared to milk produced by the ruminant when it is not fed the isolated microorganism.